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PAUL W. MARTIN  
NCR CORPORATION, LAW DEPT.  
1700 S. PATTERSON BLVD.  
DAYTON, OH 45479-0001

EXAMINER

VO, TED T

ART UNIT PAPER NUMBER

2191

DATE MAILED: 01/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/017,971

Applicant(s)

MASON, TIMOTHY E.

Examiner

Ted T. Vo

Art Unit

2191

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 and 19-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17, 19-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                         |                                                                             |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                                |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____                                                             | 6) <input type="checkbox"/> Other: _____                                    |

#### DETAILED ACTION

1. This action is in response to the amendment filed on 10/07/2005.

The amendment to Claims 11-20 caused the Claims 1-10 cannot be restricted from the current pending claims. This action will **withdraw the restrictions** applied to Claims 1-10. Claims 1-10 herein will be examined in this Office Action. Any amendment in the future to Claims 1-10 requires complying with 37 CFR 1.121 (See MPEP 714), i.e., a status of any Claim in Claims 1-10 would be labeled with "Original", "Currently amended", etc., accordingly.

Claims 1-10 are withdrawn from restriction.

Claims 21-31 are newly added.

The amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Claims 1-17, 19-31 are pending in the application.

#### ***Response to Arguments***

2. Claim 18 is canceled. The claimed text must not be presented. It requires deleting the claimed text.

Applicants' arguments have been considered, but are moot in view of new ground rejection. Respectfully, Applicants would require cooperating with restriction/election requirement. Any new added claims should be in the same mode of operation within the original claims under restriction/election requirement. Examiner assumes that the expansion of newly added Claims is the same invention with the amended Claims 1-20 that has been originally filed.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 11-17, 19-20 are rejected under 35 U.S.C. 102(a) as being anticipated by Morrison et al, (EP No. 1 098 277 A2).

Given the broadest reasonable interpretation of followed breadth of claims in light of the specification.

As per Claim 11: Morrison shows a convertible self check-out system that discloses,

*A method for configuring software to correspond to the physical configuration of a convertible checkout station comprising:*

*moving a component of a convertible checkout station to a position relative to another component of the convertible checkout station to generate a configuration signal that indicates a physical configuration of the checkout station* (See abstract, it discusses a position that converts between self-checkout mode and assisted mode. Fig 19, and 20, 21, Figure 31 show *moving a component* that moves a interface screen unit between assisting position and self-checkout position, the Computer 9A will receive the generating signals from the Interface unit 140. For example (See Abstract), a checkout terminal includes a terminal base having a customer side and a personnel side which is opposite the customer side. The checkout terminal also includes a code entry device secured to the terminal base. The code entry device is operable in (a) an assisted mode of operation in which a first item for purchase is entered with the code entry device by retail personnel, and (b) a self-service mode of operation in

which a second item for purchase is entered with the code entry device by a customer. During operation of the code entry device in the personnel mode of operation (a) the retail personnel is positioned on the personnel side of the terminal base, and (b) the customer is positioned on the customer side of the terminal base. During operation of the code entry device in the self-service mode of operation the customer is positioned on the customer side of the terminal base. A method of operating a checkout terminal is also disclosed); *and*

*determining a software configuration for the checkout station corresponding to the physical configuration indicated by the generated signal* (See text block [0195], an actuating mechanism that generates signals send to processing unit 78b (FIG. 9A) that executes either assisted mode or self-checkout mode; and further see consecutive text blocks [0140] to [0143]; see FIG. 9A showing the system generating signals and the processing unit determine the signals. This figure shows PROCESSING UNIT 78b receiving interface the signal from INTERFACE UNIT 142 which is in self-check out mode and the signal from PERSONAL INTERFACE TERMINAL 76 which is in assistant mode. See further related texts).

As per Claim 12: Morrison shows a self check-out system that includes a processing unit and memory that covers,

*"The method of claim 11 further comprising: loading software modules corresponding to one operational mode for the checkout station"* (See a processing unit and memory, in FIG 9A and associated text. Note: means for *loading software modules* is conventionally known performed by processing unit and memory).

As per Claim 13: Morrison shows a self check-out system that includes a processing unit and memory that covers, *The method of claim 12 further comprising: executing the loaded software modules to operate the checkout station in the operational mode corresponding to the indicated physical configuration.* (See FIG 9A. and see text related to checkout/assisted mode operations. It should be noted with the showing of processing unit includes, it includes means of *executing the loaded software modules to operate the checkout station*).

As per Claim 14: Morrison shows a self check-out system that includes,

*The method of claim 13 further comprising: interrupting the execution of the loaded software modules in response to detection of a change in the signal indicative of the physical configuration of the checkout station* (See Abstract, code entry device, See FIG 9A: PROCESSING UNIT 78b has means of detecting changes between self-check mode and assistant mode. For example, the change (interrupt) from one mode to another mode (self-checkout and assistant modes)).

As per Claim 15: Morrison shows a self check-out system that includes, *The method of claim 14 further comprising: loading software modules corresponding to another operational mode for the checkout station in response to the detected change in the signal indicative of the physical configuration of the checkout station* (See the operating system of Fig 9A comprising a processing unit and memory for loading software modules (means for loading operational modes is performed by processing unit and memory. FIG 9A includes at least two operational modes)).

As per Claim 16: Morrison shows a self check-out system that includes, *The method of claim 11 further comprising: executing the loaded software modules for the other operational mode to operate the checkout station in the other operational mode corresponding to the detected change in physical configuration of the checkout station.* (See FIG 9A: PROCESSING UNIT 78b has means of detecting changes between self-check mode and assistant mode. For example, the change causes the self-check performs the operation from one mode to another mode (self-checkout  $\leftrightarrow$  assistant modes). See texts col.47: 65-67; cols.48-52, col.53: 1-19).

As per Claim 17: Morrison shows a self check-out system that discloses the claimed limitation in Claim 17. See rationale addressed in Claim 11 above.

As per Claim 19: Morrison shows a self check-out system that discloses the claimed limitation in Claim 19 (See Abstract and see FIG 9A: PROCESSING UNIT 78b has means of detecting changes between self-check mode and assistant mode See switch means self-checkout  $\leftrightarrow$  assistant modes between 156 and 142 of item 78. See related texts of FIG. 9A).

As per Claim 20: Morrison shows a self check-out system that discloses the claimed limitation in Claim 20. (See Abstract and See FIG 9A: PROCESSING UNIT 78b has means of changing between self-check

Art Unit: 2191

mode and assistant mode. For example, the change (interrupt) from one mode to another mode (self-checkout and assistant modes)

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A person shall be entitled to a patent unless –

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-10, 21-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gellner et al., (US Pat. No. 5,555,060), in view of Morrison et al (EP No. 1 098 277 A2).

Given the broadest reasonable interpretation of followed claims in light of the specification:

As per claim 1: Gellner discloses a position sensor having a light source, a photo interrupter having a variable optical density pattern formed thereon and a photo detector for generating an output signal proportional to optical density of said photo interrupter (See FIGs. 5, 7) (Claim: *a Physical Configuration actuator*), the photo interrupter pattern having an optical density gradient segment used to generate said feedback control signal and having calibration segments preceding said gradient segment, the calibration segments having predetermined maximum and minimum optical density values (See FIGs. 5, 7)(Claim: *a Physical Configuration signal generator responsive to the actuator to generate a signal identifying the physical configuration of a convertible checkout station*);

Gellner is not intended to generate such a configuring signal to control a convertible checkout. However, Morrison discloses a convertible checkout and using a computer code to position the mode operation of a convertible self-checkout (see Morrison: Abstract).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply teaching of Gellner into the convertible check-out as for conforming to the availability of actuator/sensor and conforming to the common use of this well-known concept because controlling and positioning a movement using light sensors and actuators are well-use in detecting positions.

As per claims 2-10:

- Claims 2, and 6 are further claiming mechanical means that subjects to reed switches mounted to surfaces:

Official notice is taken that this claiming, reed switches, relates to another class that is added to an independent claim using configuring software. However, the use of reed switches is well known used with sensor to the position of the rotor/actuator in order to detect and change the magnetic field.

It would be obvious to an ordinary in the art to use reed switches, which are use common in sensors for doing actuating matters.

- Claim 3 is further claiming mechanical means that subjects to a tab.

Official notice is taken that this claiming 'tab' relates to another class that is added to an independent claim using configuring software. However, tab is well known for mounting.

It would be obvious to an ordinary in the art to further include tab into teaching of Morrison in view of Gellner for mounting an object as conforming to a requirement.

- Claim 4 is further claiming mechanical means that addresses to a magnet.

Official notice is taken that this claiming 'magnet' relates to another class that is added to an independent claim using configuring software. However, magnet switch is well known for using in movement control an object. Using it is only a preemption of science concept.

It would be obvious to an ordinary in the art to include magnet switch for control moving part.

- Claim 5, Gellner further teaches sensor see Figure 7, reference number 50, where sensor device radiates switch signal is known in the art.

- Claim 7 is further claiming mechanical means that subjects to sliding drawer and a swivel.

Official notice is taken that this claiming 'sliding drawer and a swivel' relates to another class that is added to an independent claim using mechanical movement is well-known.



Art Unit: 2191

It would be obvious to an ordinary in the art to include sliding drawer in the convertible self-checkout of Morrison, as common use of mechanical parts.

- Claims 8-9 are further claiming mechanical means that subjects to recessed compartment.

Official notice is taken that this claiming 'recessed compartment' relates to another class that is added to an independent claim using mechanical subject is well known.

It would be obvious to an ordinary in the art to include recessed compartment in the convertible self-checkout of Morrison, as common use of mechanical parts.

-Claim 10, Gellner further teaches a processor coupled with signal generated by the signal generator (See FIG. 5, FIG. 7).

As per Claim 21: Geller discloses,

A method for configuring software to correspond to the physical configuration of a convertible checkout station comprising:

detecting a spatial relationship between at least two components (FIG, 5, 7: reference no. 50) of a convertible checkout station;

generating a configuration signal corresponding to the detected spatial relationship (FIG, 5, 7: out put of reference no. 50); and

determining a software configuration (FIG, 5, 7: out put of reference no. 54) for the checkout station in response to the generated configuration signal.

Gellner is not intended to generate such a configuring signal to control a convertible checkout. However, Morrison discloses a convertible checkout and using a computer code to position the mode operation of a convertible self-checkout (see Morrison: Abstract).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply teaching of Gellner into the convertible check-out as for conforming to the availability of actuator/sensor and conforming to the common use of this well-known concept because controlling and positioning a movement using light sensors and actuators are well-use in detecting positions.

As per Claims 22-31:

- Claim 22, further in view of Gellner, the circuit of FIGs. 5, 7 has means of detecting rotation in Claim 22.

- Claim 23, further in view of Gellner, the circuit of FIGs. 5, 7 has means of detecting rotation in Claim 23.
- Claim 24, see rationale addressed to Claim 2.
- Claim 25, further in view of Gellner, the circuit of FIGs. 5, 7 has means of detecting emission from rotation in Claim 25.
- Claim 26, see rationale addressed to Claim 5.
- Claim 27, see rationale addressed to Claim 4.
- Claim 28, further in view of Gellner, the circuit of FIGs. 5, 7 has means of detecting optical signal from the sensor in accordance to the limitation in Claim 28.
- Claim 29, further in view of Gellner, the circuit of FIGs. 5, 7 has means of detecting infrared signal from the sensor in accordance to the limitation in Claim 28.
- Claims 30-31, further in view of Gellner, the circuit of FIGs. 5, 7 has means of detecting mechanical extension from a movement of a component in accordance to the limitation in Claims 30-31.

#### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ted T. Vo whose telephone number is (571) 272-3706. The examiner can normally be reached on 8:00AM to 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Y. Zhen can be reached on (571) 272-3708.

The facsimile number for the organization where this application or proceeding is assigned is the Central Facsimile number **571-273-8300**.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ted T. Vo  
Primary Examiner  
Art Unit 2191  
December 23, 2005